

ABSTRACT OF THE DISCLOSURE

There is provided an EML (an electro-absorption modulator integrated laser) fabricating method for optical communication in which a compound semiconductor structure with a laser diode directly combined with a modulator is prepared simultaneously, a two step InP layer is formed on the compound semiconductor structure, an InGaAs layer is formed on the InP layer, a mask layer is formed in a trench between the laser diode and the modulator, Zn or a Zn compound is deposited in a metal contact forming area on the laser diode and the modulator except for the trench and diffusing the Zn, and the mask layer and InGaAs layer are selectively etched to a predetermined depth.